

Testimony on House Bill 259

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The Department of Environmental Quality is providing informational testimony on this bill. The Department has some technical concerns about the bill but believes the technical concerns can be mitigated by rule writing and design circular changes.

Technical concerns.

1. Gray water is not a benign waste. It is contaminated by fecal coliform bacteria that are present in shower, laundry and kitchen drain water, and household chemicals. Gray water contains the same types of contaminants that residential sewage contains but in lower concentrations.
2. If all the gray water is removed from the waste stream for a residence the remaining waste water will be high in strength. It will contain two to three times the organic material and total nitrogen that normal household sewage contains. This high-strength waste is difficult to treat with normal residential wastewater treatment systems. High-strength waste is also precluded from being treated by all the typical on-site wastewater treatment systems we currently utilize in our on-site subsurface wastewater design circular DEQ-4. High-strength waste must be pre-treated before using one of these systems.
3. The use of a gray water system in the winter months may develop problems with freezing due to no real irrigation season and the lower biological activity that is developed in a "regular" system due to the breakdown of the organic components of the household waste. If the gray water system is not intended to be used during the winter then there will have to be a standard wastewater treatment system installed to accommodate those times of the year when the gray water system is not in use.
4. HB 259 should be codified in Title 75, Chapter 5, Section 305, Montana Code Annotated to place it in the proper place for rule writing and adoption by local governments.

Rule writing for mitigation of DEQ's technical concerns.

1. Since gray water is not a benign waste new rules would need to have the same separation requirements as regular wastewater. This includes a four foot separation to groundwater, 100 foot separation to drinking water supplies, 100 foot separation to surface water and flood plains, and 10 to property lines. The new rules should also include subsurface discharge such as a drain field or drip irrigation to eliminate the potential for human contact without disinfection.

2. DEQ currently has no rules or design circular for high-strength waste. We have asked for a legislative appropriation to contract for development of a high-strength waste design circular. Once development of standards for high-strength waste standards is underway it will be easy to generate design criteria for the type of waste left after all the gray water is removed from household waste.